

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A computer-implemented method for creating a product sales model for each of a plurality of products, the method being implemented as a plurality of program instructions stored in a computer readable storage medium in a computer system, said method comprising the steps of:

creating, using the computer system, a plurality demand groups, wherein each demand group is a group of highly substitutable products, further wherein each demand group is a set of at least one product and at least one of the demand groups is a set of at least two products;

creating, using the computer system, a demand group sales model as a function of price wherein said demand group sales model models sales for each demand group, further wherein said demand group sales model provides a single model for modeling sales of all of the products in each said demand group;

creating, using the computer system, an internal market share model wherein said internal market share model determines the fraction of the internal sales of each demand group comprised by each product; and

creating, using the computer system, said product sales model by combining said demand group sales model and said internal market share model, wherein said product sales model models sales for individual products.

2. (Currently Amended) The computer-implemented method, as recited in claim 1, further comprising the steps of:

collecting, using the computer system, raw data, wherein said raw data includes product parameter data which is missing or incomplete; and

generating, using the computer system, imputed variables from the raw data, wherein said imputed variables are used to estimate said missing or incomplete data, further wherein the imputed variables are used to create the product sales model.

3. (Currently Amended) A computer program product in a computer-readable media, the computer program product comprising:

computer program instructions which, when executed by a computer, cause the computer to generate an econometric engine for modeling sales as a function of price, the engine further comprising:

an imputed variable generator for generating imputed econometric variables including a base price variable and a base volume variable, wherein said base volume variable represents the volume of product units sold in the absence of discount pricing or other promotional effects; and

a coefficient estimator coupled to the imputed variable generator, and wherein imputed variables generated by the variable generator are used by the coefficient estimator to create a demand group sales model as a function of price, wherein said demand group sales model provides a single model for modeling sales of all of the products in each said demand group, an internal market share model, and a combined product sales model wherein said product sales model models sales for individual products.

4. (Previously Amended) The computer program product, as recited in claim 3, wherein the imputed variable generator receives raw data, and cleans the data.

5. (Previously Canceled)

6. (Previously Added) The computer-implemented method as recited in claim 2, further comprising the steps of:

defining an equalizing factor for the products of each demand group.

7. (Previously Added) The computer-implemented method as recited in claim 2 wherein said imputed variables comprise an imputed base price variable and an imputed base volume variable.

8. (Previously Added) The computer-implemented method as recited in claim 7, further comprising the steps of:

generating a moving average for base price; and
generating a moving average for base volume.

9. (Previously Added) The econometric engine as recited in claim 4 wherein said raw data includes missing or incomplete data sets.

10. (New) The computer-implemented method as recited in claim 8, further comprising the steps of:

defining an equivalent price for each said product using said equalizing factor;
defining equivalent units sold for each said product using said equalizing factor;
defining an equivalent base price for each said product using said equalizing factor;
defining equivalent base units sold for each said product using said equalizing factor;
creating a demand group equivalent sales model based on said equivalent price and said equivalent units sold;

indexing said demand group equivalent sales model by divided said demand group equivalent sales by baseline demand group equivalent sales;

creating an equivalent internal market share model based on said equivalent price and said equivalent units sold; and

creating, using the computer system, an equivalent product sales model by combining said demand group equivalent sales model and said equivalent internal market share model, wherein said equivalent product sales model models equivalent sales for individual products.

11. (New) The econometric engine as recited in claim 9, further wherein:

said imputed variable generator generates additional econometric variables including an imputed consumer stockpiling variable, an imputed day of the week variable, an imputed seasonality variable, an imputed promotional variable, and an imputed cross-elasticity variable;
and

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wherein said econometric engine utilizes a mixed-model framework wherein data across all stores and products for a selected demand group is utilized simultaneously.